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The goal of this pilot study is to integrate traditional Chinese Medicine (TCM) to address breast cancer diagnosis, treatment and progression. It has been recognized that the heterogeneity of breast tumors makes treatment and prognosis debatable. TCM is based on the principle that illness is caused by an imbalance of chi, imbalance of yin and yang, or the deficiencies of dampness and dryness. In addition to a measurement of pulse and an inspection of the tongue, inquiries are made as to diet, exercise, meditation, sleep and environment. The TCM practitioner then arrives at a pattern-specific diagosis. A total of 30 women with breast cancer were enrolled in the study and examined by the certified TCM practitioner at the Osher Center of Integrative Medicine of UCSF. Additional questions related to demographic, reproductive, family history, and lifestyle, were asked by the research nurse. Additionally pulses were measured using sphygmography and digital photography were performed to take tongue pictures. TCM data analyses classify TCM patterns into four distinct categories. We present data on the relationship between TCM patterns, predicting variables and breast cancer stages. Extending to larger sample, and a short and long-term follow-up on recurrence and survival are our future plans.

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Final Report

TRADITIONAL CHINESE MEDICINE MODELS AND EPIDEMIOLOGIC APPROACHES IN BREAST CANCER

1. Introduction

The heterogeneity of breast tumors makes treatment decisions difficult. Different clinical patterns with the same stage may warrant different treatments and similar clinical features may also pose different prognoses. Traditional Chinese Medicine (TCM) offers a way to further classify breast cancer patients into different groups according to physical examination (pulse measurement, examination of body type, inspection of the tongue) and medical history (lifestyle, dietary habits, exercise habits, sleep pattern, emotional state, and other health problems). In general, TCM classifies patients into four groups: 1) Predominantly Yin deficient group; 2) predominantly Yang deficient group; 3) predominantly Qi stagnation group; and 4) predominantly damp accumulation group. This further classification has a potential to improve the current prognostic model of breast cancer survival. However, before we can undergo the prospective breast cancer survival study with the TCM classification, we need to devise a standardized TCM method to classify patients consistently.

The goal of this pilot epidemiologic study is to explore the feasibility of generating TCM classifications using a standardized method among women who were newly diagnosed with breast cancer in the San Francisco Bay Area. We believe results from this study will help provide insights into a new paradigm of breast cancer diagnosis, treatment and progression.

2. BODY

Rationale for the study design

The wide prevalence of use as well as the growing interest in TCM warrants a scientific evaluation of this modality. Though TCM has been used in China for thousands of years and has stood the test of time, it has not been thoroughly and rigorously evaluated according to Western scientific standards, and only until it has also stood up to the scientific rigor will it be accepted as a standard complement to Western medicine. This pilot study seeks to test the feasibility of formulating TCM classification of breast cancer using a standardized method. If successful, TCM classification formulated with this standardized method can be evaluated in a systemic scientific manner, and thus provide credibility to future TCM studies.

We do need to emphasize that this is a pilot study and is exploratory only, since to our knowledge, no similar study has been performed in the United States. We do not intend for this to be a large-scale reliability and validation study of TCM, nor do we intend for this to be a comprehensive or conclusive assessment of all aspects of TCM. Our main purpose of this study would be to test the feasibility of using the standardized method to make a TCM classification of breast cancer, using the classification by TCM practitioner as the standard for comparison. We will not be assessing the efficacy of any aspects of TCM in this study, but we do intend for this preliminary pilot study to provide the necessary information to pursue that means. A result from

this pilot study showing the feasibility of formulating TCM classification of breast cancer by the standardized method is necessary before we begin to address those issues in a larger study.

Outcome measures

The main outcome measure will be the four TCM categories mentioned previously. The outcome will be measured in two ways: 1) TCM practitioner assessment and 2) standardized method. In the TCM practitioner assessment, TCM practitioner will assign patients to one of the four TCM categories according to the result of the physical examination and medical history (see TCM practitioner intake form). In the standardized method, patients will answer pre-tested standardized questionnaires, have pulse measured by the sphygmography machine, and digital picture of the tongue taken for standardized characteristics (color, fur, sublingual vessels) analysis. The final TCM categories in the standardized method will be generated by a statistical algorithm (see statistical consideration in the material and methods section).

It should be noted that in this study, neither the assessment by the standardized method nor the assessment by the TCM practitioner diagnoses breast cancer, since the patient will already have an established diagnosis by her treating physician in the breast care center. The two methods of TCM assessment only sub-classify patients with established diagnoses.

Study subjects Eligible cases will be: (a) women between the ages of 30 and 79 who were diagnosed with histologically-confirmed primary invasive localized or regional breast cancer in the San Francisco Bay Area; (b) have no history of prior invasive or in situ breast cancer; (c) reside in one of the Bay Area counties: San Francisco, Marin, Alameda, Contra Costa, San Mateo, and Santa Clara at the time of diagnosis; (d) able to communicate in English; (e) able to consent for herself; and (f) are psychologically stable to participate in the study.

The intent of this study is exploratory and purely descriptive with no intent to generalize the findings to any target population. In addition, convenience sampling will be used to include consecutive eligible patients until we reach our target number of 30 patients. The target number has been modified from 60 to 30 based on our extensive recruitment efforts; and time and budget constraint.

Subjects recruitment

Our original recruitment site of UCSF Breast Care Center did not grant the permission for patient recruitment despite of the approval from the protocol review committee, two reasons were noted, one was because of the competing nature of this study with other on-going clinical trials; and the other reason was this grant does not provide compensation for the clinical staff in the Breast Care Center. We thus modify the recruitment methods from breast cancer support groups. A flyer was sent to support groups in the SF Bay Area and one of our nurse researcher presented the materials to the support group members and requested for participation in our study. The groups included Women's Cancer Resources Center of Oakland. East Bay Cancer Support Groups, Marin Breast Cancer Watch, CPMC Breast Health, St. Luck Breast Health and Chinese Joy Club. We emphasized to the patients during the recruitment process that participation in the study is voluntary. Patients are free to decline to be in the study or to withdraw from the study at any point even after they have signed the consent form. Breast cancer patients with no medical contraindication thus called our study office and scheduled an appointment to come to Osher Center for Integrative Medicine (OCIM) at UCSF to be interviewed and examined. Due to the

availability of our TCM practitioner's Friday appointment schedules, several interested subjects were unable to meet this particular appointment schedule, thus a few of them could not participate in our study.

Methods of data collection

Patients reported to OCIM at UCSF for the scheduled appointment. OCIM has provided a private room to be used by this study. Prior to beginning the study, the research assistant explained to the subjects about the study, the interview and the examination for the study, and the risks for participating in the study and to answer any questions subjects may have. If the subject agrees to participate, she then asked to sign an informed consent form and a medical release form allowing study personnel to abstract data from her medical record.

After the subject signed the informed consent, the data collection began with a 30-minute standardized interview by the research assistant, who recorded patient's answers on the standardized questionnaires titled "patient health questionnaire" and "confidential supplemental questionnaire. Information collected were family history of breast cancer, history of benign breast disease, dietary history, consumption of herbs, physical activity, and life events (see patient health questionnaire and confidential supplemental questionnaire).

After the standardized interview, subjects were placed on sphygmography machine for pulse measurement. The sphygmography machine is called ZM-IIIc Pulse Collector, which is produced by Scientific Development Company in collaboration with Shanghai University of TCM. The machine was kindly lent by Drs. Tom Wen and Yuan Chiu Lin. The machine has not been approved by FDA. A cuff would be placed on patients' wrist, with a pulse sensor applying minor pressure at the radial pulse. The sphygmography machine worked similarly to an electrocardiogram (EKG) machine, and the pulse measurements generated pulse wave graphs similar to those produced by the EKG machine.

After the completion of pulse measurement, digital photographs of patient's tongue were taken to assess the color, fur and sublingual vessels of the tongue (see tongue characteristic form). A digital camera would be placed in front of patient's face. She was asked to open her mouth and stick out her tongue straight and the top view of the tongue was photographed. The top view is for the observation of the shape, color, and the fur of the tongue. Next, patient was asked to lift her tongue and tilt her head back slightly for the photographing of the underside of the tongue. The underside view is for the observation of sublingual vessels. The digital photos would only include the image of the tongue. Patient's face would not appear in the picture, and any feature on patient's teeth or mouth that might personally identify her would be digitally removed from the photos.

Finally, subjects were examined by a certified TCM practitioner, Beverly Burns. Approximately 15 minutes is allowed for TCM examination, which consists of two components, interview, and physical examination. TCM practitioner first began by interviewing the patient about her general medical background, gynecologic and obstetric history, sleep pattern, and other physical illnesses that the patient has experienced (see TCM Practitioner Intake Form). Next, the TCM practitioner performed partial physical examination, which consists of inspection of body type, facial complexion, and tongue and feeling the radial pulses at both wrists. Patients would not have to disrobe for any part of the examination by the TCM practitioner. The TCM practitioner then

began the physical examination by observing patient's body type (tall, short, obese, skinny... etc) and patient's facial complexion (pale, red...etc). Then the TCM practitioner asked the patient to open her mouth and stick out her tongue to examine the body and coating of the tongue. The tongue is characterized by its color, texture, moisture, size and shape. Finally, the TCM practitioner would feel patent's radial pulses at both wrists. The pulses are characterized by the strength, rate, rhythm, and size. TCM practitioner then recorded her findings on the TCM practitioner intake form, which consists of both the interview and physical examination sections.

Although patients would answer similar questions asked by the interviewer and the TCM practitioner, this step was necessary because independent assessments by the standardized method and by the TCM practitioner are necessary for an unbiased comparison between the two methods. In addition, the TCM practitioner uses a more open-ended interview, where as questions in the standardized method are close-ended. The questions may be similar between the two methods, but the methods of obtaining the information are somewhat different.

In addition to collecting data through standardized TCM assessment and the examination by the TCM practitioner. The clinical data are limited to size of the breast tumor, regional lymph node involvement, metastasis and stages.

Data management Statistical consideration

A subject-tracking database was created using a Microsoft Access database program. Each subject was assigned a study identification number, starting with 01 and increase consecutively with each new subject. The data collected from the standardized TCM assessment, assessment by the TCM practitioner, and medical record abstraction were edited first by the study assistant for incomprehensible or incomplete answers, and then edited again by the project nurse researcher. The data were double entered into the computer by two different study members and consistency-checking program were used to find the discrepancies between the two data entries to reduce error.

The principal objective will be to assess the relationship between objectively measured patient attributes by the standardized method and the 4 major TCM diagnostic categories. Secondary objectives will be to assess the extent to which of the conceptual categories that underlie the TCM practitioner's assessment (e.g. pulse, tongue color, hot/cold diet prevalence, dietary preference, sleep and activity pattern and other characteristics) can be correlated with the relevant objective measures of the standardized method.

The following table gives the major TCM constructs and the corresponding objective measures:

TCM Domain	TCM Construct	Derivation of objective measure by the standardized method
Tongue	Color: red, pale, purple, yellow, white, purple red	Visual assessment of photograph & color chart
Tongue	Texture: with fur or not	Visual assessment of photograph
Pulse	Pattern: fine+rapid, slow+weak, wiry+tight, slippery+soggy	Pulse machine
Sleep	Restful or not	Questionnaire: hours spent in sleeping

TCM Domain	TCM Construct	Derivation of objective measure by the standardized method
Diet	Preference: stimulants, bitter sweet/salty, spicy, sausy	Diet questionnaire
Activity	Active or not	Questionnaire: exercise regularly
Body type	Slim/heavy	Personal questionnaire, BMI
Physical	Symptoms: constipation/diarrhea, fatigue, fever, cold hand etc.	Personal questionnaire on medical symptoms

Reimbursement

Each study participant was reimbursed \$30.00 in check for her time and effort. The check was issued by UCSF. According to the 2000 Occupational Employment Survey of California, the average hourly wage in San Francisco is about \$20.00. Taking into the consideration of the time travel to the study site (30 minutes), transportation and/or parking, and the time of participating in the study (60 minutes), \$30.00 would be an appropriate amount, which is also the amount given to patients in other similar studies at UCSF.

3. Key Accomplishment and Study Results

We have encountered so many problems related to this study. First the study was delayed for almost two years because of the UCSF IRB and protocol review committee's issues. We finally received the approval and began to plan the study last April. However, due to the budget constraint, we could not afford to hire a half time assistant, and had to compromise in hiring assistant in an hourly basis. The set back in patient recruitment was another drawback to the study. The actual field study did not begin until April 23, 2004. We had had a very hard time recruiting non-Asian women with breast cancer. We have relaxed the eligibility criteria because for those women recently diagnosed with breast cancer, they were too worry about their treatment options, they did not have energy to participate this kind of study. Other reason was due to the inflexible appointment scheduling at OCIM, our TCM practitioner only has appointments on Friday; some women could not make it especially on Fridays. Finally we ended up with 30 study subjects. The recruitment ended on September 14 of 2004.

On average, the age of diagnosis ranges from 40 to 76, with a mean age of 52.8.

11 subjects were Caucasian, and 19 subjects were Chinese and Asians.

95% of subjects were diagnosed at Stage 1 and II.

Mean age of menarche was 13.6 ranging from age 10 to 16.

20% (6/30) have gained weight, but 17%(5/30) have lost weight since diagnosis,

Marital status were as follows, 23%(7/30) were single, 50% (15/30) were married,

10% (3/30) were divorced, 10% were widowed and 7% were partnered with someone.

Two thirds had given births, and the average age of first birth was 29.7. 27% (8/30) had prior miscarriages and 43% (13/30) had abortions. 30% are currently having periods.

Majority (90%) were college graduates (27/30), only 10% attended high school or vocational school, currently 50% were unemployed.

Surprisingly, 27% (8/30) are currently smoking cigarettes, smoked less than ½ pack a day.

Only 36% (11/30) are never drinkers, however, if they drink, mostly drank less than 1 drink per week.

85% of the subjects now engage in regular exercise.

Ten of them considered themselves as "meat eater"; and none of them were vegetarians. More than half (16/30) have taken oral contraceptive pills, and 20% had taken HRT. One third of them have gone through psychotherapy or counseling, and are currently taking anti-depressant medication.

Two thirds of the subjects have a family history of cancer; one thirds' mother had cancer, 27% father had cancer, 20% grandparents have cancer, and 10% siblings have cancer. Their past medical history reveals 5 ever suffered anemia, 3 with arthritis, 2 had asthma, 2 had bleeding problem, and 7 had depression or emotional problem, 12 of them had hay fever or sinus problem, 5 had hepatitis, 4 had thyroid diseases, 3had high blood pressure, 2 had intestinal problem, and 5 had skin disease.

Half of the 30 subjects had chemotherapy, 16 had radiation therapy and 13 had hormonal therapy

Facial complexion shows 20 of them were "good", and 18 of them had "enlarged" tongue; 12 were "normal" but 6 were "wet" and 10 were "dry". As to the color of the tongue, 23 were pale, 13 were white, 3 were red, and only 3 were normal.

As to the TCM categories, 9 women is predominately Yin deficient, and 11 of them are predominately Qi stagnation and 10 of them are predominately Damp accumulation. None of them belong to predominately Yang deficient. We further examine the characteristics for these three groups of women, but no particular factors stand out.

4. Discussion and Conclusion

We concluded that the feasibility of a study like this is possible. Note that this is a very select group of women with breast cancer who are interested in CAM; two thirds of them have ever received acupuncture treatment though it should not bias the validity of this study. However, there are a few issues are noted especially we would like to continue recruiting more patients but there is no financial support to continue the study. We have taken the tongue photos, but no one can help us to interpret the findings. I have a contact in Taiwan, Dr. Hong Chang, who is a MD and a CAM practitioner and had conducted a similar study in Chung Ken Memorial Hospital. I hope to bring the photos to him for interpretation at a later time. And because of the small sample size of 30, and lack of the tongue data, recursive statistically partitioning would not be able to perform. Additionally, because study subjects were recruited from different area and different hospitals, we were unable to obtain their medical records. Lastly the pulse machine is in an experimental stage, there were bugs in the computer program still need to be corrected.

5. Personnel received pay from the research effort

The principal investigator, Marion Lee, Ph.D., has extensive research experiences with breast cancer. Our TCM practitioner, Beverly Burns has a master degree in TCM and is a licensed acupuncturist. She has been a staff acupuncturist at UCSF/Mt Zion Breast Care Center since 1998. Judy Schwartz was hired in March 2004 to be our research coordinator, but she was

with the study for only two months. Julie Madsen is the research nurse, and Thoa Ngo is the research assistant.

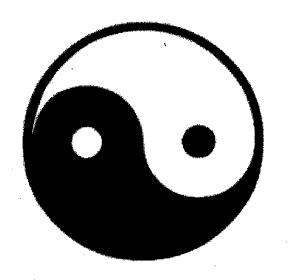
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7. Appendices

- 1. Study Flyer
- 2. TCM Practitioner Intake Form
- 3. Tongue Characteristics Form
- 4. Patient Health Questionnaire
- 5. TCM Study Pulse Form

Traditional Chinese Medicine Models and Epidemiologic Approaches in Breast Cancer



Dr. Marion Lee, Professor of the Department of Epidemiology and Biostatistics at UCSF is conducting a study involving Traditional Chinese Medicine (TCM). The goal of this pilot study is to examine the feasibility of making TCM classification among breast cancer patients using a standardized method. Women between the ages of 30 to 79, who are newly diagnosed with breast cancer, are eligible to participate in the study.

Participation in the study includes:

- 45-minute interview about lifestyle, diet, exercise, and family history, conducted by an experienced interviewer.
- Pulse measurement by the pulse machine.
- Digital photography of the tongue.
- 30-minute TCM examination by a certified TCM practitioner.

Participant will be reimbursed for \$50 as a token of appreciation for her time and effort.

Interested subject can call the study office at (415) 476-3366 to arrange for an appointment.

Appen	di	x	2
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ID#		

TRADITIONAL CHINESE MEDICINE MODELS AND EPIDEMIOLOGIC APPROACHES IN BREAST CANCER

TCM PRACTITIONER INTAKE FORM

NOTE TO THE TCM PRACTITIONER: FOR STUDY PURPOSES, PLEASE DO NOT ASK THE PARTICIPANT ANY QUESTIONS RELATED TO HER BREAST CANCER DIAGNOSIS OR HER TREATMENT.

A. GENERAL MEDICAL BACKGROUND

1. Have you ever received acupuncture?YESNO	
If yes, when?	
For what condition?	·
ti i 1 C1-9 VEC NO	
2. Are you allergic to any drugs or foods?YESNO Please explain:	-
3. Is there a history of disease in your family?YN	
If yes, please explain:	
4. Have you been treated for a prolonged illness, injury, hospitalization, If yes, please explain:	
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5. Were there any severe illnesses during your childhood, or complication birth? YES NO	ms during your
If yes, please explain:	

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B. TCM QUESTIONS:

Do you sweat easily or pr If yes, please explain:			
Are you thirsty often: If yes, please explain:	N	Time of	
How is your appetite?			
A. What is your taste pr B. What are your food p	references?		
How is your sleep?			
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C. REVIEW OF SYSTEMS:

PLEASE NOTE IF THERE ARE ANY COMMENTS ABOUT THE FOLLOWING (check box if negative):

Head	
Ears	
Eyes	
Nose	
Throat	
Skin	
Respiratory System	
Circulatory System	
Digestive System	
Genito-Urinary System	
Neurological System	
Musculo-Skeletal	

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D. GYNECOLOGIC HISTORY

3. D	o you usually experience cramping? Y N
If	o you assume the order of the property of the
<u> </u>	
	That is your current method of birth control?
8. D	If yes: age of onset age of completion id you experience severe menopausal symptoms?Y N If yes, please describe:

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TRADITIONAL CHINESE MEDICINE MODELS AND EPIDEMIOLOGIC APPROACHES IN BREAST CANCER

TCM PRACTITIONER INTAKE FORM

FOR	THE	TCM	PRA	CTIT	IONER	TO	FILL	OUT:

(Please record descriptions in the space provided)

A. FACIAL COMPLEXION AND BODY TYPE

B. PULSE MEASUREMENT

C. TONGUE

D. TCM CATEGORIES

	PREDOMINATELY YIN DEFICIENT
	PREDOMINATELY YANG DEFICIENT
	PREDOMINATELY QI STAGNATION
	PREDOMINATELY DAMP ACCUMULATION
COI	MMENT ON SUB-CATEGORIES:

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Traditional Chinese Medicine Models and Epidemiologic Approaches in Breast Cancer

TONGUE CHARACTERISTICS FORM

4	
	Color
А.	L.UIUI

$_{\Box 05}$ deep red/purple $_{\Box 06}$ red at the tip $_{\Box 07}$ red at sides $_{\Box 08}$ prickles $_{\Box 09}$ other: specify $_{\Box 09}$:□01 normal pink colo	r □02 pale □03	red: □04 dusky		
□09 other: specify	□05 deep red/purple	□06 red at the tip	□07 red at side:	s □08 prickles	
	□09 other: specify				

B. Texture

□01 normal smooth fur	If thickened fur is present:
\square 02 thickened fur $\rightarrow \rightarrow \rightarrow$	Color: □01 white □02 yellow □02 gray
□03 mirrored coat	
□04 other:	Location: □01 entire tongue □02 root of tongue
specify	□03 center of tongue

C. Moisture

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TRADITIONAL CHINESE MODELS AND EPIDEMIOLOGICAL APPROACHES

PATIENT HEALTH QUESTIONNAIRE

The following is a detailed questionnaire that asks about many areas of your health. Please respond as best as is possible. Should you have questions, please feel free to ask the study coordinator for clarification.

A. PAST MEDICAL HISTORY

Other major illnesses (please describ	oe):	-			
				-	
Have you had cancer other than ord					
Hepatitis Have you had cancer other than bre		□YES	□NO		
Heart Problems	□YES	□NO	Tuberculosis	□YES	□NO
Hay Fever/Sinus Problems	□YES		Thyroid Disease	□YES	□NO
Epilepsy/Seizures	□YES	□NO	Stomach Ulcers	□YES	□NO
Drug Abuse/Alcohol Dependency		□NO	Stroke	□YES	□NO
Diabetes	□YES	□NO	Skin Disease	□YES	□NO
Depression/Emotional Problems	□YES	□NO	Psychiatric Psychiatric	□YES	□NO
Bleeding/Bruising/Blood Disorder	□YES	□NO	Lung Disease	□YES	□NO
	□YES	□NO	Liver Disease	□YES	□NO
Arthritis Asthma/Bronchitis/Emphysema	□YES	□NO	Kidney Disease	□YES	□NO
Anemia	□YES		Intestinal Problems	YES	□NO
	□YES		Immune Disorders	□YES	□NO
Alcoholism	□YES	□NO	High Blood Pressure	□YES	□NO

3. Have you had any pr If yes, please describ Location (Right/Lef	oe (Fine Needle A	or biopsies? Aspirate, Core	□YES Biopsy, Lumpe <u>Date</u> ———	□ NO ctomy, Mastectom Result	ny, etc.)	
4. Have you ever had b	reast cancer?	□ YES	□NO			
5. If you were diagnose	ed with breast can	icer, did you re	eceive other typ	es of treatment for	your breast	cancer?
(Please list dates.)				If YES, dates:		
Chemotherap	y	☐ YES				
Radiation The	- -	☐ YES			,	
Hormone The 6. List all current me	erapy	\square YES	□NO		1	4
therapy, and all over	er the counter dru	ıgs):				
7. Are you taking any	vitamins or herbs		□ NO			
If yes, please list:						
9. Do you exercise reg	gularly?	ZES □ì		pe?		
If yes, how often?	☐ less than 1x p ☐ 1x per week ☐ 2x per week ☐ 3x per week ☐ more than 3x		For hov	v many minutes? _	· · · · · · · · · · · · · · · · · · ·	
10. Have you undergo			σ?		□ YES	□NO
					□ YES	□NO
11. Have you been ho	spitalized for psy	cniatric reason	18 (
12. Have you taken m If yes, what? 13. Have you ever pa			eness, or a psych	matric condition?	☐ YES	□ NO

14. Please list what you eat for a typical meal: Breakfast:	
Lunch:	
Dinner:	
Snacks:	
15. Do you eat meat regularly? ☐ YES ☐ NO 16. Do you eat dairy regularly? ☐ YES ☐ NO 17. Please list the foods you crave regularly:	
B. GYNECOLOGIC HISTORY	
(If Male, please skip to Patient Social History section on the next page)	
1. How old were you when you first menstruated?	
2. What is the number of days between your periods?	•
01. Less than 21 days 02. 21 to 25 days 03. 26 to 28 days	
04. 29-30 days 05. 31-35 days 06. > 36 days	
3. At what age did you have your first period?	·
4. How many times have you been pregnant?	
A. How many miscarriages have you had?	
B. How many abortions have you had?	
C. How many live births have you had?	
D. Have you had a period within the last 6 months? If yes, is your period: Regular or If no, this is because of: natural menopause (no abdominal surgery)? Age	
chemotherapy or radiation therapy? Age pregnant or breastfeeding? Age	
E. If you have given birth, what was your age at your first full-term pro	egnancy?
5. Have you had a hysterectomy? Date of surgery	O □ NOT SURE
6. Have you had any ovaries removed? Date of surgery If ves: How many were removed: One Two	O □ NOT SURE

7. Do you, or have you ever used, birth control pills?	□ YES □ NO	NOT SURE
If yes, for how many years? (If less than one year,	, enter 1.)	
number of years		÷
beginning at what age		
8. Have you ever used, or do you use, estrogen or estrog	gen replacement therapy?	•
□ No, never. (If NO, please go to question	n 11.)	
□Yes, currently.		
C XZ Land and		0.01.1.11.1.4
Yes, in the past. 9. If you used estrogen currently or in the past, what for	m of estrogen do/did you	i use? Check all that apply:
. □Patch	,	, · ·
□Vaginal Cream		
□ Other		•
10. How many total years have you used estrogen repla	cement? (If less than or	ne year, enter 1.)
number of years		
beginning at what age		
11. What was the approximate date of your last pelvic e	exam (internal female ex	am)?
month year		
C. PATIENT SOCIAL HISTORY		
1. What is your marital status?	•	
□ Single		
☐ Divorced		
□ Partnered		
□ Widowed		
2. Who currently lives in your home?		
3. Education level: Select one that best describes your e	ducation level:	anno sieto'a dorree
□ Some grade school		ge or associate's degree
☐ Some high school	☐ Undergradı	
☐ High school graduate		r professional school
☐ Vocational or technical school beyond hig	•	
4. What is your current occupation?		
5. What is your current employment status?		
☐ Employed 32 hours or more per week	☐ Part time student	☐ Homemaker
☐ Employed less than 32 hours per week	□ On medical leave	☐ Retired
☐ Full time student	☐ Disabled	☐ Unemployed
☐ Other		
LI VIIIVI		•

6. Have you ever smoked:				
\square Yes, but only in the	past.			
☐ Yes, currently.				
□ No, never.			4 1.0	
If yes: A. On average, how r	nany packs per day	y did you or do you c	urrently smoke?	:
☐ less than ½ pac	ck per day □1½	packs per day		
□ ½ pack per day	$\Box 2$	packs per day		
□1 pack per day	□ m	ore than 2 packs per o	day	
B. At what age did yo	ou START smokin	·	rs old	
C. At what age did yo	ou STOP smoking	? yea	rs old	
7. Have you ever or do you cur	rently drink alcoho	ol?		•
□Yes, but only in the	past. Yes, cu	rrently. \square No, ne		
If currently yes: How many	y alcoholic beverag	ges (beer, wine, mixed	d drinks, etc.) do	you consume weekly?
☐ less than 1 drink		-19 drinks per week		
☐ 1-4 drinks per w		ore than 19 drinks per	week	
☐ 5-9 drinks per w	reek			
· · · · · · · · · · · · · · · · · · ·	·			
•		•	•	
D. FAMILY HISTORY			•	
Please take a moment to tell us list of cancer types below as a Types of Cancers:	s about the history reference for "Typ	of cancer and other note of Cancer".	nedical condition	is in your family. Use ou
	Invasive Cer	vical Lymphoma	o Ovari	an
Bladder/Kidney	Leukemia	Melanoma	Thyro	
Breast Colorectal	Lung	Mouth/Thro	•	
Colorectar	Lung	1/100411 1111		
	WINDE OF	OTHER MEDICAL	AGE AT	AGE AT DEATH
RELATIONSHIP	TYPE OF	OTHER MEDICAL CONDITIONS	DIAGNOSIS	(if deceased)
	CANCER	COMMITTORIS	DIAGNOSIS	(II dooddod)
Mother		-		
Father				
Sister				
Sister				
Brother				
Brother				
Daughter				
Daughter				
Son				
Son				

Maternal Grandfather
Paternal Grandfather
Maternal Grandmother

1	 		
Paternal Grandmother			·····
Other		<u></u>	

E. REVIEW OF SYSTEMS

Please mark if you have experienced any problems or symptoms in the following areas. Indicate if it is current or in the past, and please include dates when appropriate.

	or in the past, and please include date	Current	Past	Comments:
ርሰ	nstitutional			
<u>О</u> А.	Recent weight changes			
<u>А.</u> В.	Recurrent fevers, chills, sweats			
<u>С.</u>	Fatigue			
D.	Stress			
E.	Pain			
<u>г.</u> Еу				
A.	Change in vision			
B.	Glaucoma			•
	r/Nose/Mouth/Throat			
	Change in hearing	The state of the s	a Bid and Juda, to a flant material and	The state of the s
<u>A.</u> B.	Ringing in the ears			
<u>C.</u>	Nose bleeds			
D.	Sinus problems			
E.	Mouth sores			
<u>F.</u>	Bleeding gums			
	Frequent sore throats			
	espiratory			
Α.	Asthma or wheezing		/	
B.	Shortness of breath			
$\frac{\overline{C}}{C}$	Chronic cough			;
	nrdiovascular			
Ă.				
B.				
$\frac{2}{C}$	Swelling of feet, ankles or hands			
D.				
Ē.	Cold hands and/or feet			
G	astrointestinal			
A				
В.				
C	Nausea/vomiting			
D	. Diarrhea	1		·
E				
F.	Rectal bleeding			
G	. Abdominal pain			
H	. Hemorrhoid			
N	eurological			
A		one of a mount of the management of the languagement of the langua		
B				
D	. Inditioness of this mile polisations			revised 5/2

C. Weakness or paralysis			
D. Change in memory or concentration			
	Current	Past	Comments:
Genitourinary			
A. Blood in the urine	20 th Alimande Braddi each (Larian)	South moveds - Mild of Heading for the constitution	
B. Burning with urination C. Change in force of urine stream			
D. Sexually transmitted disease			
E. Change in sexual function or interest			
F. Pain/problems with periods			
G. Uterine tumors			
H. Abnormal uterine bleeding			
I. Prostate trouble (men)			
J. Scrotal masses (men)			
Integumentary (skin & breasts)			,
A. Recurrent rashes			
B. Changing moles			
C. Skin cancer or melanoma			
D. Non-healing wounds			
E. Change in hair or nails			
Psychiatric			
A. Memory loss or confusion		·	
B. Nervousness			
C. Depression			
D. Change in sleep	-		
E. Other			
Musculoskeletal			
A. Joint stiffness or pain		1	
B. Muscle pain or cramping			
C. Weakness of muscles or joints			
D. Back pain			
E. Difficulty walking	,		
Endocrine			:
A. Heat or cold intolerance			
B. Excess thirst or urination			
Allergic/Immunologic			
A. Frequent cold or flu	are a consistent of the state o		
B. Environmental allergies			
C. Food Sensitivity			·
Hematologic/Lymphatic			
A. Easy bruising	an Jun I. B. Julianou, Sun ville, y., an	an an ilitatoria a su animalia de significa	
B. Enlarged lymph nodes			
D. Entargod IJ mph nodes	_l		,

F. DEMOGRAPHIC QUESTIONS (Optional)

1. Race/Ethnicity:			•	
☐ Caucasian/White				
☐ African American			•	
☐ American Indian, Aleutian or Es	kimo			
☐ Asian or Pacific Islander				
□ Unknown				
☐ Other (please specify):			□ I Inlenovem	
2. Are you of Spanish or Hispanic Origin?	□ Yes	□ No		
3. Are you of Ashkenazi Jewish Descent?	□ Yes	□No	☐ Unknown	
			•	·
1. In case our office needs to call you for fu	rther inform	nation, when	n is a convenient tim	ne to reach you?
Best Time AM/PM				
Address				•
Phone Number				
				
2. Is there someone whom we may contact	in case we r	need to reac	h you in the future?	What is his/her name,
address and phone number? What is his/he	r relationshi	ip to you?	,	
Name	Relation	ship		
Address				
Phone Number				
				•
Your participation in this study is greatly a	ppreciated.	Should you	have any questions	and/or comments, please
feel free to speak with the study coordinato				
The number of the Cancer Information So	ervice is 1-8	300-4CAN	CER.	
Thank you for your participation.	•			

Appendix 5

TCM STUDY PULSE FORM

ID#_

Age: Name: Height Interviewer: Weight Address: Blood City & Zip: Pressure TCM Exam Home Phone: Photo Work Phone: Pulse Interview Measure Date Directions: Disposition Date

•	· ·
Pulse Fluency	Pulse Rate
Pulse Rhythm	Pulse Form
	(
Pulse Name	

Pulse Position	Pulse Strength
Pulse Fluency	Pulse Rate
Pulse Rhythm	Pulse Form
·	·
Pulse Name	
	•